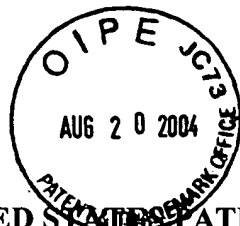


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**THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re Application of: Phyllis Liethem et al.

Serial No: 09/863,585

Filed: May 16, 2001

For: **ABSORBENT PRODUCTS AND METHODS OF PREPARATION  
THEREOF**

Group Art Unit: 3761

Examiner : J. F. Stephens

**CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being deposited on August 18, 2004, with the United States Postal Service as First Class Mail in an envelope addressed to: Commissioner for Patents, Mail Stop Appeal Brief - Patents; P.O. Box 1450, Alexandria, VA 22313-1450.

Signature:

*Barbara De Vecchi*  
Barbara De Vecchi  
William J. Spatz

**SUPPLEMENTAL APPELLANTS' BRIEF**

Commissioner for Patents  
MAIL STOP APPEAL BRIEF - PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Sir:

This is an appeal from the rejection of claim 104 in this application.

This brief is submitted in triplicate as required by 37 C.F.R. § 1.192(a).

Appellants have previously paid the requisite fee for the Notice of Appeal and the Appellants' Brief. Thus, no new fee is due for filing this Supplemental Brief. MPEP § 1208.02. If there is such a fee due, then please charge any deficiency or credit any overpayment to Deposit Account 50-0540.

**REAL PARTY IN INTEREST**

The real party in interest in this appeal is Rayonier Products and Financial Services Company ("RPFSC") which acquired the application from Rayonier Inc. by assignment. The assignment to RPFSC has not yet been recorded with the U.S. Patent & Trademark Office.

**RELATED APPEALS AND INTERFERENCES**

Appellants are not aware of any related interferences which directly affect, or are directly affected by, or have a bearing on the Board's decision in this appeal. However, Appellants have requested the declaration of an interference with U.S. Patent No. 6,063,982 upon the allowance of this application.

Furthermore, Appellants note that the same combination of references was asserted against the pending claims of Appellant's immediate parent application U.S.S.N. 09/334,125. The arguments substantiating the patentability of Appellants' instant claim 104 over the asserted combination of references are the same as those filed in Appellants' Brief for the parent U.S.S.N 09/334,125.

**STATUS OF CLAIMS**

Claim 104 is pending in this application. Claims 1-103 and Claims 105-150 have been cancelled.

Claim 104 stands rejected under 35 U.S.C. § 103(a) as allegedly obvious over U.S. Patent No. 3,658,064 to Pociluyko (hereinafter "**Pociluyko**") in view of U.S. Patent No. 2,083,575 to Novak (hereinafter "**Novak**").

Appendix A, annexed hereto, contains a copy of Claim 104.

**STATUS OF AMENDMENTS**

Appellants appeal the Office Action mailed June 25, 2004 rejecting Claim 104. No amendment was filed subsequent to this Office Action. Thus, this appeal is directed solely to the claim 104 as reproduced in Appendix A.

**SCHEDULE OF CITED PRIOR ART**

**Pociluyko** (U.S. Patent No. 3,658,064) discloses an absorbent article, namely a disposable diaper, made with a pad of fluffed wood pulp (**Pociluyko**, Col. 4, lines 36-53).

**Novak** (U.S. Patent No. 2,083,575) teaches a process for making an absorbent feltlike paper by wet laying pulp which has been treated with caustic soda. (**Novak** Col. 2, lines 14-28 and Col. 2, line 54 to Col. 3, line 20).

**SUMMARY OF THE INVENTION**

The present invention relates to absorbent personal hygiene devices, such as for example diapers, which are comprised of an absorbent core containing wood fiber pulp interposed between a water barrier sheet and a layer that allows liquid to pass through it. The wood fiber pulp used in the invention has been treated (extracted) using a caustic solution at relatively low temperature (below 60°C). Wood fiber pulp which is extracted with cold caustic is structurally different than conventional wood fiber pulp by reason of the removal of hemicellulose and lignin from the constituent cellulose fiber by the cold caustic treatment. (See the previously asserted prior art, **Chatterjee**, Col. 4, lines 50-68, and compare Fig. 1 and Fig. 3 of **Chatterjee**; see also the Specification of this Application, page 4, lines 9-23). The cold caustic extracted wood fiber pulp used in the claimed product is in individualized fiber form (i.e. fluffed). Individualized wood pulp fibers are formed by mechanical action of a hammermill mill, or other attrition device, prior to incorporation into the absorbent devices. The wood fiber pulp

in the absorbent cores of the invention is not chemically crosslinked. (Specification at page 1, lines 5-11, page 14, lines 10-22).

In the production of absorbent devices such as baby diapers, incontinence and catamenial devices and wound dressings (i.e. absorption intensive devices) which contain wood fiber pulp, it has been conventional to use chemical crosslinking to increase the stiffness of the wood fiber pulp fibers, so that a fiber matrix made from them retains its bulk and pore volume when wet, thereby enhancing its absorbency (Specification at page 2, line 16 to page 3, line 10; and **Chatterjee**, Co. 1, lines 35-40).

Prior to the present invention, it was not believed to be possible to achieve the absorption, insult (or re-wetting), liquid retention, softness and pad integrity of modern absorbent personal hygiene devices without employing chemically crosslinked wood fiber pulp.

Chemically crosslinked wood pulp fiber has increased the wet stiffness which prevents wet fiber collapse, thereby enhancing absorbency. (Specification, page 3, lines 3-9). The Specification of the present application at page 2, lines 16 to 22 references several prior patents directed to the use of chemically crosslinked wood fiber pulp in absorbent personal hygiene articles. The previously cited art of record, **Chatterjee**, is another such example. The present invention surprisingly discovered that by employing wood fiber pulp according to the invention, an absorbent core with desirable absorbency properties for use in personal hygiene devices could be formed without chemically crosslinked wood fiber pulp. The avoidance of chemically crosslinked wood fiber pulp was the expressed objective of the present invention (Specification at page 1, lines 6-12).

The present invention is commercially important in that it enables the manufacture of absorbent articles containing wood fiber pulp without the expense of using

chemically crosslinked wood fiber pulp. The same invention has already been patented in U.S. Patent No. 6,063,982 with which Appellants have requested that an interference be declared. Applicants' Request for Interference was filed in this application on August 27, 2001.

### **ISSUES**

The issue on appeal is whether Claim 104 is patentable under 35 U.S.C. §103(a) over **Pociluyko** in view of **Novak**.

### **GROUPING OF CLAIMS**

Only Claim 104 is pending. Thus, no grouping of claims is necessary.

### **ARGUMENT**

**Claim 104 is patentable under 35 U.S.C. §103(a) over Pociluyko in view of Novak.**

The Examiner has rejected claim 104 under 35 U.S.C. 103 (a) as being unpatentable over Pociluyko (USPN 3,658,064) in view of Novak (USPN 2,083,575). The Examiner stated that Pociluyko discloses an absorbent article comprising a fluid permeable topsheet layer, a substantially fluid impermeable backsheet layer and a sublayer of fluff material. The Examiner conceded that Pociluyko does not disclose the method of manufacturing his fluff material, and does not suggest that Pociluyko discloses the use of cold caustic (base) treated pulp in his absorbent articles. Rather, the Examiner states that Novak discloses a method of making fluff pulp capable of being used in personal hygiene articles which comprises treating a wood fiber pulp containing wood fibers with a base at room temperature. Therefore, the Examiner concluded that the present invention is obvious over the combination of these two references.

The present invention relates to absorbent composites comprised of cold caustic (a base) extracted wood fiber pulp which then is fluffed prior to being interposed between a fluid permeable top sheet and an impermeable bottom sheet.

Applicants submit that the Examiner has not established a *prima facie* case of obviousness. To establish a *prima facie* case of obviousness, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. In addition, there must be a reasonable expectation of success. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure, MPEP 2143; *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

The Examiner's reliance upon the combination of Pociluyko and Novak to arrive at the present invention is misplaced because neither Pociluyko nor Novak suggest that the Novak pulp would be suitable for use in the claimed absorbent composites. Further, Novak does **not** teach that his pulp is fluffed. The pulp product of Novak is a wet-laid felt and not a fluff material as the Examiner has alleged. As explained in the present Specification at page 14, lines 10-23, to fluff a wood fiber pulp, it must first be dried and then subjected to dry shredding in a Hammermill or other attrition mill. The **Chatterjee** reference, which was previously cited by the Examiner, describes the same procedure for making wood pulp fluff at **Chatterjee**, column 6, lines 18-34. In contrast, **Novak** describes introducing sheets of pulp into a Holland beater "with sufficient water to allow the stock to properly circulate." After the stock of **Novak** is separated, it is dumped into a stock chest and run off on a paper machine in the usual manner to make felt-like paper. See **Novak**, col. 2, line 54 to col. 3, line 16. Accordingly, **Novak** clearly describes the manufacture of wet-laid paper, not dry shredded fluff.

Those skilled in the art could not substitute the felt of Novak for the fluff material of Pociluyko to produce the presently claimed invention as the Examiner has concluded, even if

they did the resultant composite would not contain “fluffed wood fiber pulp” as claimed.

Further, since the teachings of Pociluyko and Novak were known to those skilled in the art for more than 30 and 70 years, respectively, before the present invention, even if Novak taught fluffed pulp, it is improper for the Examiner to conclude without benefit of suggestion in the cited art that a person skilled in the art would find it obvious to combine these two references to arrive at an absorbent composite which does not require chemically crosslinked pulp. If the invention were obvious as the Examiner has concluded, it would not have taken 70 years for Novak’s caustic extracted pulp felt to be fluffed and incorporated in the presently claimed absorbent composite.

Accordingly, Applicants submit that the Examiner’s §103 rejection is improper because 1) Novak does not disclose a fluffed pulp as the Examiner has alleged; 2) the combination of references relied upon is not suggested by the prior art, as is required; 3) even if the Examiner’s combination were to be suggested, it would not yield the presently claimed combination, and 4) the prior art previously relied upon (**Chatterjee**) teaches away from the use of pulp which is not chemically crosslinked.

**CONCLUSION**

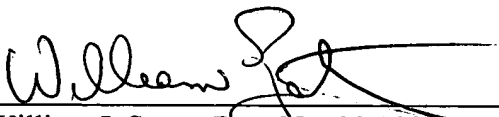
For the foregoing reasons, it is submitted that the presently pending claim 104 is allowable and the rejection of Claim 104 is improper and should be reversed. Allowance of Claim 104 is in order and such action is solicited.

Dated: August 18, 2004

Respectfully submitted,

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Appendix A

Claim 104.

An absorbent personal hygiene device comprising: a layer that allows liquid to pass, a water barrier sheet, an absorbent core interposed between said layer and said sheet, the absorbent core containing at least about 25% of fluffed wood fiber pulp, wherein said fluffed wood fiber pulp comprises wood fiber pulp that has been cold caustic extracted and fluffed by mechanical action and is without chemical crosslinking.